

IN THE CLAIMS

Please amend the following claims.

Claims 1-11 (cancelled)

12. (currently amended) A process ~~for providing an interconnect structure with low capacitance, the process comprising:~~

~~patterning at least two metal lines forming a low-k material upon a substrate; and forming an a-C:B:F material between said at least two metal lines, over said low-k material;~~

patterning said a-C:B:F material to form a hard mask; and

patterning said low-k material with said hard mask.

13. (original) The process of claim 12, wherein said a-C:B:F material is formed by the process comprising:

preparing a gas mixture to form a fluorinated amorphous carbon (a-C:F) material; and mixing said gas mixture with a boron-containing gas.

14. (original) The process of claim 12 wherein said a-C:B:F material is formed by chemical vapor deposition techniques.

15. (original) The process of claim 12, wherein said a-C:B:F material has an atomic composition of 45% carbon, 40% fluorine, and 15% boron.

Claims 16-21 (cancelled)

22. (original) A process for providing an interconnect structure with the process comprising:
 - forming a metal layer upon a substrate;
 - patterning said metal layer;
 - forming an a-C:B:F barrier layer onto said metal layer; and,
 - forming a low-k material onto said a-C:B:F barrier layer.
23. (original) The process as described in claim 22 wherein said a-C:B:F barrier layer is deposited by way of chemical vapor deposition techniques.

Claims 24-30 (cancelled)

31. (new) A process comprising:
 - forming a low-k material upon a substrate;
 - forming an a-C:B:F barrier layer onto said low-K material; and,
 - forming a metal layer onto said a-C:B:F barrier layer.